

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

1.-5. (Canceled)

6. (Original) A method for increasing food and energy uptake from a livestock feed by livestock comprising:

administering to the livestock a feed having an effective amount of hop acid capable of decreasing the production of unoxidized carbon sources in a digestive system fluid of the livestock.

7. (Previously presented) The method of claim 6 wherein the hop acid is selected from at least one of the group consisting of alpha acids, beta acids, isoalpha acids, rho-isoalpha acids, tetrahydroisoalpha acids and hexahydroisoalpha acids.

8. (Currently amended) The method of claim 7 wherein the alpha acids are selected from at least one of the group consisting of humulone, cohumulone,[[,]] and adhumulone.

9. (Original) The method of claim 7 wherein the beta acids are selected from at least one of the group consisting of lupulone, colupulone, and adlupulone.

10. (Original) The method of claim 6 wherein the amount of hop acid is 2 ppm of digestive system fluid.

11. (Original) The method of claim 6 wherein the livestock is selected from the groups consisting of cattle, horses, pigs, and zoo animals.

12. (Previously presented) The method of claim 6 wherein the hop acid is capable of increasing the level of propionate in the digestive system fluid.

13.-16. (Canceled)

17. (Previously presented) The method of claim 7, wherein the hop acids are selected from at least one of the group consisting of alpha acids and beta acids.

18. (Previously presented) The method of claim 6, wherein the livestock is a ruminant.
19. (Previously presented) The method of claim 6, wherein the livestock is a cow.
20. (Previously presented) The method of claim 6, wherein the livestock is a poultry or fowl.
21. (Previously presented) The method of claim 6, wherein the livestock is a chicken, duck, pheasant or turkey.
22. (Previously presented) The method of claim 6, wherein the livestock is a pig.
23. (Previously presented) The method of claim 6, wherein the livestock is a horse.